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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,406	10/26/1999	JAMES M. BROWN	QCPA9900029	5890

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
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EXAMINER
WILSON, ROBERT W

ART UNIT	PAPER NUMBER
2661	17

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 June 2004</u>.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4 and 5* is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.0   The application of James M. Brown et al. for a "METHOD AND APPARATUS FOR
EFFICIENT DATA TRANSMISSION CONTROL IN A WIRELESS VOICE-OVER-DATA
COMMUNICATION SYSTEM" which was filed on October 26, 1999 and amended on 10/1/03
without foreign priority. Upon reconsideration the finality of the previous rejection has been
withdrawn. The rejection which follows is a first non-final rejection.   The case was examined
and Claims 1-5 are pending.

Claim Rejections - 35 USC § 103

2.0   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.0   **Claims 1-2** are rejected under 35 U.S.C. 103(a) as being unpatentable over DeClerck

(U.S. Patent No.: 5,515,375).

Referring to **Claim 1**, DeClerck teaches: A method for transmitting time-sensitive
information over a wireless voice-over-data communication system, used in conjunction with a
predefined data protocol (The applicant broadly claims a "voice-over-data communication
system". Figs 1-6 show a method for sending voice and control messages or time sensitive
information via wireless which contains both a voice and SIGNAL MESSAGEs in a predefined
protocol or per Abstract or col. 3 line 65-col. 4 line 16. The examiner interprets sending voice as
voice data as a voice-over-data communication system), comprising the steps of:

defining a minimum segment size for information to be transmitted (The applicant broadly
claims "minimum size segment". The examiner has interpreted a minimum segment size as the #
of voice bits or voice frames sent by the multiplexer when the vocoder is sending voice data at
the lowest rate and when maximum # of control message frames or control message bits are
being sent per Figs 3-4 or Abstract or col. 3 line 65-col. 4 line 16)

defining a maximum segment size for information to be transmitted, said maximum segment size
greater than said minimum segment size (The applicant broadly claims "maximum segment
size". The examiner has interpreted the maximum segment sizes as the number of voice bits or
voice frames being sent by the multiplexer when the vocoder is at the highest rate and either no
or a small number of control message bits or frames are being sent per Figs 3-4 or Abstract or .)

generating a first segment from said time-sensitive information if a sufficient quantity of said time-sensitive information is available for transmission said first segment having a segment size between said minimum segment size and said maximum segment size (The applicant broadly claims a "first segment size". The examiner has interpreted the "first segment sizes" as the number of voice bits or voice frames when the vocoder is at the highest rate and either no or a small number of control message bits or frames are being sent by the multiplexer which is less than or equal to the maximum segment size and larger than the minimum segment size per Figs 3-4 or Abstract or col. 3 line 65-col. 4 line 16)

and generating a second segment having a segment size less than or equal to said maximum segment size upon the occurrence of a predefined event (The applicant broadly claims a "second segment size". The examiner has interpreted the "second segment sizes" as the number of voice bits or voice frames when the vocoder is less than the highest rate and a large number of control message bits or frames are being sent by the multiplexer upon the predefined event of the necessity to send a control message per Figs 3-4 or Abstract or col. 3 line 65-col. 4 line 16)

DeClerck does not expressly call for: segment but teaches sending voice bits or voice frames

It would have been obvious to one of ordinary skill in the art at the time of the invention sending voice frames or voice bits performs the same function as segment size.

In Addition:

wherein said predefined event comprises the receipt of an acknowledgment message (The applicant broadly claims "acknowledgement" and "predefined event". The examiner interprets "predefined event" as the necessity to send a control message or acknowledgment per Figs 3-4 or Abstract or col. 3 line 65-col. 4 line 16) as claimed in **Claim 2.**

Claim Objections

3.0   Claim 3 is objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims.

The present invention is directed to a apparatus which negotiates a maximum segment size before transmitting the data to the receiver. The closest prior art DeClerck teaches that vocoder data and control data are multiplexed together in order to make more efficient use of the frames but no negotiation is performed between the vocoder and the receiver. The closest prior art De Clerck (U.S. Patent No.: 5,515,375) does not either singularly or in combination anticipate, disclose, or render the following claim limitation obvious:

"wherein said maximum segment size is negotiated between a transmitter and a receiver" as claimed in Claim 3.

Allowable Subject Matter

4.0   The present invention is directed to a apparatus which negotiates a maximum segment size before transmitting the data to the receiver. The closest prior art DeClerck teaches that vocoder data and control data are multiplexed together in order to make more efficient use of the frames but no negotiation is performed between the vocoder and the receiver. The closest prior art De Clerck (U.S. Patent No.: 5,515,375) does not either singularly or in combination anticipate, disclose, or render the following claim limitation obvious:

"means for negotiating a maximum segment size with a receiver" as claimed in Claim 4.

In Addition:

Claim 5 is allowable because it depends on **Claim 4.**

Response to Applicant's Arguments

5.0   The examiner respectfully disagrees with the applicant's argument relative to Claims 1-2 in which the applicant states that De Clerck fails to show or teach the limitations of "defining a minimum segment size for information to be transmitted" and defining a maximum segment size for information to be transmitted". The applicant has broadly defined a "minimum segment size", "maximum segment size", "first segment", and a "second segment" in the claims. The examiner has interpreted maximum segment size as the maximum amount of voice data which can be sent by the multiplexer. The minimum segment size as the minimum amount of voice data which can be sent by the multiplexer. Please refer to the above rejection for details.

6.0   *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9314 for regular

communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-4700.

Robert W Wilson
Examiner
Art Unit 2661

RWW
June 23, 2004

DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600